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ABSTRACT

Disclosed is a A hydrogen storage material comprising has a magnesium-containing intermetallic compound which can form a hydride with hydrogen. The intermetallic compound comprises has an alloy of magnesium and a trivalent metal selected from the group of Sc, Y, La and the rare earth elements. Preferably, the intermetallic compound comprises a scandium magnesium alloy. In an advantageous embodiment, the The hydrogen storage material also comprises can further have a catalytically active material.

Furthermore, an electrochemically active material, as well as an electrochemical cell comprising the above hydrogen storage material are disclosed.